



reliance on promotion prescribe less appropriately,<sup>13</sup> and the patients who are exposed more to direct to consumer advertising request more advertised drugs. These requested drugs are usually prescribed, often despite doctors' reservations about treatment choice.<sup>14</sup>

Both critics and supporters of direct to consumer advertising agree that it is likely to expand drug treatment in healthier populations. This can occur through broader disease definitions, based on physiological measures rather than on clinical events; through promotion of drugs for disease prevention; and through prescription drug use for symptoms previously treated with over the counter remedies or non-drug approaches. An additional effect, observed in the United States at a population level, is substitution of newer for older drugs among those already receiving treatment.

## Newer drugs are not necessarily better

Evidence on clinical outcomes is often inadequate when drugs first come on to the market, at times leading to false impressions. COX 2 inhibitors, for example, were widely believed to be safer than other non-steroidal anti-inflammatories when first launched. An assessment of the full experience of serious adverse events in comparative trials suggests the contrary.<sup>15</sup>

This type of comparative information does not reach the public in direct to consumer advertisements. In a 10 year analysis of advertising in US magazines, 91% of advertisements omitted information about the likelihood of treatment success and 71% failed to mention any other possible treatments.<sup>16</sup>

## A powerful cumulative effect

With more than \$2.5bn (£1.8bn; €2.9bn) spent on direct to consumer advertising in the United States last

year, the cumulative message may be stronger than any individual campaign. A market researcher estimated that in late 1999, Americans on average saw nine prescription drug advertisements a day on television. To an unprecedented degree they portrayed the educational message of a pill for every ill—and increasingly an ill for every pill. —Barbara Mintzes

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## Endpiece

### Disability and cure

Indeed, through the invention of disability status, culture now regulates pain in ways that may well increase, prolong, or even create it. As agents of the state, doctors are required not only to treat pain but also to judge whether it merits compensation—a dual role that can easily turn countertherapeutic. How do you cure a patient you have already certified as disabled?

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